

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application. Claims 1-20 have been **CANCELLED**. No new amendments have been added.

5

**Listing of Claims:**

1-20. (**CANCELLED**)

10 21. (**PREVIOUSLY PRESENTED**) An interactive digital television set-top apparatus for coupling to a network for providing contextually-mapped biomedical media service comprising:

an interface for receiving a video stream from the network;

a controller for causing the video stream to be stored in a digital video recorder,

15 such stored video being accessible for play-back using a software search agent; and

a personal biological sensor for generating a real-time signal for transmission via the network interface, the real-time signal enabling such set-top apparatus to be classified in a promotional group for targeted messaging, whereby a promotion video stream is directed to the set-top apparatus adaptively in response to the real-time signal, the

20 received video stream comprising a biomedical expertise message for clinical diagnosis that is contextually mapped to a patient group by comparing automatically with an associated value stored in a database a patient diagnosis sensed using the sensor comprising a micromachined transducer coupled to a diagnosed patient for measuring or

monitoring an organic material of the patient coupled to the sensor transducer that senses the organic material, such that the sensor transducer generates therefrom the personal biological sensor signal for enabling such patient to be diagnosed via the biomedical expertise message that is adapted to the personal biological sensor signal measurement or monitoring of the organic material as generated by the sensor transducer, the biomedical expertise message being scheduled for viewing by one or more patient belonging to the patient group, the patient or promotional group being determined automatically by software for group analysis overlay that monitors patient sensor or sensor interface to process patient attribute in either group by comparing patient attribute with associated attribute stored in the database.

22. **(PREVIOUSLY PRESENTED)** The apparatus of claim 21 wherein:

the sensor comprises a DNA or protein probe, whereby the promotion video stream comprises a tele-medicine application associated with sensed DNA or protein.

23. **(PREVIOUSLY PRESENTED)** The apparatus of claim 22 wherein:

the sensor comprises a GPS location device, whereby the promotion video stream comprises a vehicular or mobile application associated with sensed location.

24. **(PREVIOUSLY PRESENTED)** An interactive digital television set-top method for providing contextually-mapped biomedical media service comprising the steps of:

receiving a video stream from via a network interface;

storing the video stream in a digital video recorder for play-back, such stored video being accessible using a software search agent; and

generating a personal biological sensor signal for transmission via the network interface, the signal enabling set-top classification in a promotional group for targeted messaging, whereby a promotion video stream is directed adaptively in response to the signal, the received video stream comprising a biomedical expertise message for clinical diagnosis that is contextually mapped to a patient group by comparing automatically with an associated value stored in a database a patient diagnosis sensed using the sensor comprising a micromachined transducer coupled to a diagnosed patient for measuring or monitoring an organic material of the patient coupled to the sensor transducer that senses the organic material, such that the sensor transducer generates therefrom the personal biological sensor signal for enabling such patient to be diagnosed via the biomedical expertise message that is adapted to the personal biological sensor signal measurement or monitoring of the organic material as generated by the sensor transducer, the biomedical expertise message being scheduled for viewing by one or more patient belonging to the patient group, the patient or promotional group being determined automatically by software for group analysis overlay that monitors patient sensor or sensor interface to process patient attribute in either group by comparing patient attribute with associated attribute stored in the database.

25. **(PREVIOUSLY PRESENTED)** The method of claim 24 wherein:

the signal is generated by a DNA or protein probe, whereby the promotion video stream comprises a tele-medicine application associated with sensed DNA or protein.

26. **(PREVIOUSLY PRESENTED)** The method of claim 25 wherein:

the signal is generated by a GPS location device, whereby the promotion video stream comprises a vehicular or mobile application associated with sensed location.